

## Permit Renewal Source Analysis & Technical Review

Company	Building Materials Corporation of America	Permit Number	7711A
City	Dallas	Project Number	209744
County	Dallas	Account Number	DB-0378-S
Project Type	Renewal	Regulated Entity Number	RN100788959
Project Reviewer	Sarah Fuchs	Customer Reference Number	CN602717464
Site Name	Asphalt Roofing Manufacturing Facility		

### Project Overview

Building Materials Corporation of America requested a renewal of their permit which authorizes an asphalt roofing facility. With this renewal, the company requests that the Line 3 Stabilizer Thermal Fluid heater (Emission Point No. [EPN] HTR6) emission rates be updated to reflect the actual heat input rate of 3.97 Million British Thermal Units per hour (MMBtu/hr) instead of 6 MMBtu/hr. Additionally the company submitted emission rates in a previous application that were rounded to only one significant figure. Since the permitted emissions on the Maximum Allowable Emission Rates Table (MAERT) are rounded to two significant figures, discrepancies arose between the MAERT and the calculated emission rates. The company is therefore requesting that the affected values be corrected. Also, Special Condition 10 which refers to the transfer of filler and backing material has been removed. This Special Condition was based on misconceptions about facility operations and sources of emissions. Filler is received and transferred as part of an enclosed, pneumatic system. There are no expected emissions from filler receiving and transfer aside from emissions associated with the baghouses which control the system (authorized under Standard Permit Number 91414 and incorporated by reference). Additionally, Fiberglass backing material rolls are not an expected source emissions. Finally, the company has requested the removal of Special Condition 22 regarding stack sampling to determine opacity. The use of new boilerplate language for opacity and demonstration of continuous compliance has made this condition redundant.

### Emission Summary

Air Contaminant	Current Allowable Emission Rates (tpy)	Proposed Allowable Emission Rates (tpy)	Change in Allowable Emission Rates (tpy)
PM	104.47	104.36	-0.11
PM <sub>10</sub>	104.47	104.36	-0.11
PM <sub>2.5</sub>	104.47	104.36	-0.11
VOC	47.91	47.90	-0.01
NO <sub>x</sub>	20.01	19.13	-0.88
CO	67.74	66.97	-0.77
SO <sub>2</sub>	128.70	128.69	-0.01
HAPs	<25.00	<25.00	0.00

### Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	09/02/2014
Compliance period:	04/23/2009- 04/23/2014
Site rating & classification:	Satisfactory, 0.60
Company rating & classification:	Satisfactory, 0.63
Has the permit changed on the basis of the compliance history or rating?	No

### Public Notice Information - 30 TAC Chapter 39 Rules

Rule Citation	Requirement
39.403	Date Application Received: 04/23/2014
	Date Administratively Complete: 05/01/2014

## Permit Renewal Source Analysis & Technical Review

Permit No. 7711A  
Page 2

Regulated Entity No. RN100788959

	Small Business Source?	No
	Date Leg Letters mailed:	05/01/2014
39.603	Date Published:	05/15/2014
	Publication Name:	<i>The Dallas Observer</i>
	Pollutants:	PM, PM <sub>10</sub> , PM <sub>2.5</sub> , VOC, NO <sub>x</sub> , SO <sub>2</sub> , CO and HAPs
	Date Affidavits/Copies Received:	06/16/2014
	Is bilingual notice required?	Yes
	Language:	Spanish
	Date Published:	05/15/2014
	Publication Name:	<i>El Extra</i>
	Date Affidavits/Copies Received:	06/16/2014
	Date Certification of Sign Posting / Application Availability Received:	06/23/2014
39.604	Public Comments Received?	No
	Hearing Requested?	No
	Meeting Request?	No
	Is 2nd Public Notice required?	No
39.419	If no, give reason:	Renewals with no increases, no new contaminants, and a satisfactory compliance history do not require 2nd Public Notice as per 30 TAC 39.419(e)(1).

### Renewal Requirements - 30 TAC Chapter 116 Rules

Rule Citation	Requirement	
116.315(a)	Date of permit expiration:	10/21/2014
116.310	Date written notice of review was mailed:	01/08/2014
116.315(a)	Date application for Renewal (PI-1R) received:	04/23/2014
116.311(a)(2)	Is the facility being operated in accordance with all requirements and conditions of the existing permit, including representations in the application for permit to construct and subsequent amendments, and any previously granted renewal, unless otherwise authorized for a qualified facility?	Yes
116.311(a)(3)	Subject to NSPS?	Yes
	Subparts <b>A, Dc, &amp; UU</b>	
116.311(a)(4)	Subject to NESHAPS?	No, the site does not emit any air contaminants regulated under 40 CFR Part 61.
116.311(a)(5)	Subject to NESHAPS (MACT) for source categories?	Yes
	Subparts <b>A &amp; AAAAAAA</b>	
116.311(a)(6)	Does this project require case-by-case MACT?	No, the site is not a new major source of HAPs.
116.311(b)	Was there a condition of air pollution that had to be addressed during this project review?	No
116.314(a)	Does the facility meet all permit renewal requirements?	Yes
116.313	Permit Renewal Fee: \$ <b>6,581.60</b>	Fee certification: Yes
	Applicable Outstanding Fees:	None as of 04/24/2014

### Title V Applicability - 30 TAC Chapter 122 Rules

## Permit Renewal Source Analysis & Technical Review

Permit No. 7711A  
Page 3

Regulated Entity No. RN100788959

Rule Citation	Requirement
122.10(13)	<b>Title V applicability: Yes, this facility operates under O-2771.</b>
122.10(13)(A)	Is the site a major source under FCAA Section 112(b)? <b>No</b>
	Does the site emit 10 tons or more of any single HAP? <b>No</b>
	Does the site emit 25 tons or more of a combination? <b>No</b>
122.10(13)(C)	Does the site emit 100 tons or more of any air pollutant? <b>Yes</b>
122.10(13)(D)	Is the site a non-attainment major source? <b>No, the facility emits less than the 50 tpy NO<sub>x</sub> emission major source threshold for DFW, and it emits less than the 50 tpy VOC emission major source threshold.</b>
122.602	<b>Periodic Monitoring (PM) applicability:</b> The company is required to monitor temperature of the incinerator with an averaging period of one hour, and to monitor visible emissions once per week of blowing stills, of storage tanks, and of mineral handling and storage facilities.
122.604	<b>Compliance Assurance Monitoring (CAM) applicability:</b> CAM applies to both the Thermal Oxidizer (direct-flame incinerator) (EPN 8/8A) and the Coalescing Filter Mist Elimination Systems (EPN CFL/34). CAM is achieved through following NESHAP (MACT) AAAAAAA requirements. Temperature monitoring for the Thermal Oxidizer as required by the MACT is required by Special Condition 28 at a 1 hour interval as opposed to the 3 hours interval specified in AAAAAAA. The Coalescing Filter Mist Elimination System is required to follow the operating range as specified in 40 Code of Federal Regulations (40 CFR) § 63.11562(a)(2) and (b)(3). The 3-hour average pressure drop across the device is required to fall within the approved operating range established as specified in 40 CFR § 63.11562(a)(2) and (b)(3).

### Request for Comments

Received From	Program/Area Name	Reviewed By/Date	Comments
Region:	4	N/A	Region did not respond by the comment deadline.
City:	Dallas	Brian Cunningham/ 09/25/2014	No objections

### Process/Project Description

The plant manufactures asphalt shingles for the roofing industry. A dry, nonwoven fiberglass mat is fed into the roofing machine from an unwind stand. The fiberglass is carried through the coating section where coating asphalt mixed with a stabilizer (limestone) is applied to both surfaces of the mat. The coating operation is followed by the surfacing section. Ceramic colored granules are blended and dropped in proper sequence onto the coated web and embedded. The back surface of the sheet is sprinkled with sand to prevent it from adhering to rolls and itself in the finished package. The hot sheet, with a mineralized surface, then goes into the cooling section of the machine. Cooling is accomplished by passing the web over a series of water-cooled drums, through water mist sprays, and between air jets. It is then accumulated in the looper section of the machine to provide surge capacity required prior to cutting. Self-seal striping dots are then applied and the sheet is cut into shingles and automatically packaged. The boiler accepts the thermal oxidizer exhaust gas for preheating recovery and fires as necessary to meet the steam needs of the plant.

### Pollution Prevention, Sources, and Controls - [30 TAC 116.311(b)(2)]

Emissions at the facility are produced by two heaters, the boiler and the standby boiler, all storage and process tanks, blowing stills, and all truck and railcar loading and unloading operations.

The Standby Boiler (EPN BLR5) is rated at 19 Million British Thermal units/hour (MMBtu/hr) and is equipped with a low

## **Permit Renewal Source Analysis & Technical Review**

Permit No. 7711A  
Page 4

Regulated Entity No. RN100788959

NO<sub>x</sub> burner (with a manufacturer represented 30 parts per million rating).

Emissions from the blowing stills, loading racks, and storage tanks vent to a thermal oxidizer (direct-flame incinerator). The thermal incinerator has a rated destruction efficiency of 95% for PM/PM<sub>10</sub>, H<sub>2</sub>S, CO, and VOC.

Emissions from stabilizer storage, stabilizer heaters, the line 1 stabilizer use bin, and sand application are vented to baghouses. Emissions from the line 1 surfacing section are vented to dust collectors. These control units have a rated capture efficiency of at least 99%.

No abatement device or method was listed for capture and reduction of SO<sub>2</sub> from the listed facilities at the site. The controls are economically reasonable and technically practicable considering the age of the facility and the impact of its emissions on the surrounding area.

Emissions from planned startup and shutdown activities are authorized by this permit from an amendment approved in June 2013. Maintenance activities are authorized either under Permit by Rule or claimed under 30 Texas Administrative Code § 116.119, De Minimis Facilities or Sources. Startup and shutdown emissions are virtually indistinguishable from production emissions. Although there may be minor emissions associated with startup and shutdown, emission factors used to quantify production emissions are considered to have enough conservatism to include any incidental increases that may be attributed to startup and shutdown. In addition, emissions from planned startup and shutdown of combustion units should not result in any quantifiable hourly emissions change for products of combustion. Although there may be transitional and incidental spikes before units stabilize during startups (5 to 15 minutes), overall products of combustion are expected to be within hourly range limits for normal loads during production operations.

### **Permit Concurrence and Related Authorization Actions**

Is the applicant in agreement with special conditions?	<b>Yes</b>
Company representative(s):	<b>Ms. Latha Kambham</b>
Contacted Via:	<b>e-mail</b>
Date of contact:	<b>11/03/2014</b>
Other permit(s) or permits by rule affected by this action:	<b>No</b>

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Project Reviewer

Date

Team Leader/Section Manager/Backup

Date